

Sump Separator Systems

900-914-20

The Model 900-914 Sump Separator Systems are water separation systems for gasoline and diesel fuel tanks located at fuel farms and refineries. As water accumulates and settles in the fuel tanks, provision must be made to remove the water from the fuel tank quickly and efficiently. The 900-914 system removes free water (water that has settled to the bottom and is not emulsified with the fuel) and emulsified water (water that is still mixed with the fuel) without operator involvement.

Benefits

- **AUTOMATED OPERATION:** The operator does not need to be available while the system is in operation
- **SUPER CLEAN DIESEL FUEL:** The product, clean and dry, is returned back to the tank
- **NO MANUAL WATER DRAINING REQUIRED:** The coalescence process eliminates manually water draining
- **SAFER OPERATION:** Operator's exposure to product is eliminated
- **EASY START UP AND MAINTENANCE:** Operator training is short. This is an easy-to-operate & easy-to-understand system
- **LOW HYDROCARBON DISCHARGE** Water waste discharge contains low hydrocarbon content
- **WATER REMOVED** All free and emulsified water in tank sump is removed
- **ELIMINATES CORROSION** Tank bottom corrosion is eliminated
- **DECREASED OPPORTUNITY FOR GROWTH OF SURFACTANTS AND MICROBIOLOGICAL** No water/fuel interface for surfactants or microbiological to accumulate
- **REDUCTION OF PRODUCT LOSS**

Specifications & Details

System flow	20 GPM/76 LPM (maximum flow)
Sizing	For use with diesel and gasoline tanks up to 30,000 barrels
System pressure	100 PSIG/ 7 BAR (maximum)
Environmental parameters	Minimum Temperature: 0 F (-17 C) Maximum Temperature: 130 F (54 C)
Operating voltage	460 VAC / 3 PH / 60 Hz / 4 AMPS
Materials of construction	Metals: Carbon Steel, Bronze, Aluminum Elastomers: Buna-N Paint: Acrylic Urethane Enamel
Pressure vessel	Carbon steel with internal epoxy coating
Inlet/Outlet connections	Fuel Inlet = 1.5" (38.1 mm) NPT Fuel Outlet = 3/4" (19 mm) 150# Raised Face Flange Water Discharge = 3/4" (19 mm) 150# Raised Face Flange
Pump/Motor assembly	Pump Type: centrifugal Motor: 2 HP (1.5 KW)
Fluid compatibility	Diesel Fuel #1 and #2
Performance	Water removed holds less than 1% hydrocarbon content
Weight	900 lbs (408 Kgs) approximate
Dimensions	54" L x 24" W x 50" H (1372 mm x 610 mm x 1270 mm)



Feature and benefit options

EXPLOSION PROOF: Meets all electrical requirements for Class I, Division II, Group D hazardous area

EASY-TO- USE OPERATOR INTERFACE: Simple ON/OFF selector switch (only for electrical versions)

COALESCER ELEMENT DIFFERENTIAL PRESSURE GAUGE: Evaluation of the coalescer element is immediate.

SYSTEM PRESSURE GAUGE: Indicates system operating pressure.

KAYDON FILTRATION COALESCING TECHNOLOGY: Kaydon Filtration coalescing technology provides water removal.

AUTOMATIC WATER DRAIN: After system senses water accumulation, it is automatically removed.

WATER METER: Totalizes the number of gallons of water removed from the fuel tank.

EASE OF INSTALLATION: Connecting the inlet and outlet connections to your fuel tank, plus providing power are all that is needed to install system.

PIPING: Schedule 80 piping with welded and flanged connections

FUEL TESTING SAMPLE PORT: A sampling port with valve is installed for a collection of a fuel sample.

PRESSURE RELIEF VALVE: Protects against pressure increase due to thermal expansion

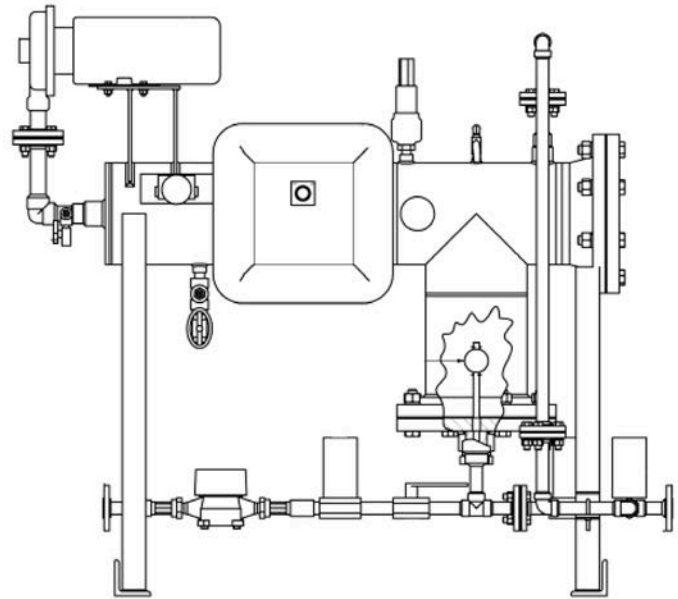
WATER FREEZE PROTECTION (optional): Keeps accumulated water in system from freezing. Recommended for installations where outside temperatures are at or below 32F (0 C) for extended periods.

DRIP PAN (optional): 35" W x 63" L with 3" lip (889 mm W x 1600 mm L with 76 mm lip).

ASME CODE "U" STAMP (optional): Uses trustworthy ASME Code design with third party approval.

WATER COLLECTION TANK (optional): 1,000-gallon (3,785 liter) water collection tank.

AIR-POWERED, TWIN-DIAPHRAGM PUMP (optional): Aluminum housing with viton diaphragm. Flow rate = 20 GPM / 76 LPM. Option includes pulsation dampener, automatic air pressure compensation, and filter-regulator with gauge (for 900-914-AIR only).



Consumables

MODEL / DESCRIPTION	QTY	PART NUMBER
Coalescer element	1	A910587
Vessel Lid Seals ⁽¹⁾	1	A029001

(1) Required for element changes

Options

DESCRIPTION	PART NUMBER
Water Freeze Protection	D921065 (900-914-20)
Drip Pan	B100553
ASME Code "U" Stamp	U STAMP
Water Collection Tank	D932010

